



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,607	12/04/2003	Kyoko Higashino	Q78703	6943
23373	7590	01/14/2005		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER LE, DANG D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,607

Applicant(s)

HIGASHINO ET AL.

Examiner

Dang D Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/24/04 have been fully considered but they are not persuasive.

Asao et al. teaches how to join the winding sub-portions to form a polyphase alternating-current winding. See Figures 1-24, column 3, lines 12-22, column 11, lines 50-65, column 12, lines 5-25 and lines 57-67, column 13, lines 10-40, column 14, lines 20-30, column 15, 30-60, and column 17, lines 35-60.

"The ancillary connection portions constituted by joint portions between said end portion of said plurality of winding sub-portions" in Asao et al. are shown in Figure 3 with the joint portions being 34 (left and right.) In Asao et al. each "ancillary connection portion" is constituted by only two "joint portions" (34). The melt portion is identified as (31). Therefore, Asao et al. does prevent the ancillary connection portions from being exposed. In addition, Asao et al. also shows the cover (35) being filled with resin in column 8, lines 17-27. The parts (35) in Figures 1-3 of Asao et al. are the covers because the cover two joint portions (34, Figure 3) constituting the ancillary portions (Figures 1 and 2.)

As a result, the rejection is still deemed proper and repeated hereinafter.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2834

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Asao et al. (6,462,453)

Regarding claim 1, Asao et al. shows an automotive alternator comprising:

- A case (1);
- A rotor (7) rotatably disposed inside said case;
- A stator (Figure 1) comprising:
 - An annular stator core (15) fixed to said case radially outside said rotor so as to surround said rotor, a large number of slots opening onto an inner circumferential side being formed side by side in a circumferential direction on said stator core; and
 - A stator winding (30) installed in said stator core; and
 - A cooling means (5) for generating an airflow for cooling said stator winding by rotating together with said rotor,
- Wherein said stator winding comprises a plurality of winding sub-portions (30a) each formed by installing a strand of wire in said slots at intervals of a predetermined number of slots so as to alternately occupy an inner layer and an outer layer in a slot depth direction, said winding sub-portions each being formed into a wave-shaped pattern in which straight portions housed in pairs of said slots separated by said predetermined number of slots are linked near axial end surfaces of said stator core by return portions, coil end groups each

Art Unit: 2834

- being constructed by arranging said return portions in a circumferential direction near axial ends surface of said stator core, respectively,
- Said stator winding is configured into a polyphase alternating-current winding by joining (16) together end portions of said plurality of winding sub-portions in a vicinity of each of axial ends of said coil end groups within a predetermined circumferential range, and
 - Covers (35, Figure 3) are fitted onto each of ancillary connection portions (Figure 1 and 2) constituted by joint portions (34, Figure 3) between said end portions of said plurality of winding sub-portions so as to closely fit onto an inner circumferential surface (left), an axial end surface (with 31), and an outer circumferential surface (right) of each of said ancillary connection portions, respectively, said covers each being filled with a first electrically-insulating resin (at S3).

Regarding claims 5-7, it is noted that Asao et al. also shows all of the limitations of the claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 2834

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asao et al. in view of Tono et al. (JP 2001-245454).

Regarding claims 2 and 4, Asao et al. shows all of the limitations of the claimed invention except for the second electrically-insulating resin.

Tono et al. shows the second electrically-insulating resin (Figure 3, 101) for the purpose of preventing oxidization.

Since Asao et al. and Tono et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the second electrically-insulating resin as taught by Tono et al. for the purpose discussed above.

Regarding claim 3, it is noted that Tono et al. also shows all of the limitations of the claimed invention.

Conclusion

Art Unit: 2834

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information on How to Contact USPTO

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/13/05

A handwritten signature in black ink, appearing to read "Dangle", is written over a faint, larger signature.

DANGLE
PRIMARY EXAMINER